

# DATA SHEET



## Three Phase Induction Motor - Squirrel Cage

Customer :	
Product line	: NEMA Premium Efficiency Three-Phase
Product code :	14284389
Catalog # :	00718XT3H213TC
Frame : 213/5TC Output : 7.5 HP (5.5 kW) Poles : 4 Frequency : 60 Hz Rated voltage : 575 V Rated current : 7.53 A L. R. Amperes : 50.4 A LRC : 6.7x(Code H) No load current : 3.20 A Rated speed : 1765 rpm Slip : 1.94 % Rated torque : 22.3 ft.lb Locked rotor torque : 240 % Breakdown torque : 280 % Insulation class : F Service factor : 1.15 Moment of inertia (J) : 1.38 sq.ft.lb Design : B	Locked rotor time : 21s (cold) 12s (hot) Temperature rise : 80 K Duty cycle : Cont.(S1) Ambient temperature : -20°C to +40°C Altitude : 1000 m.a.s.l. Protection degree : IP55 Cooling method : IC411 - TEFC Mounting : F-1 Rotation <sup>1</sup> : Both (CW and CCW) Noise level <sup>2</sup> : 58.0 dB(A) Starting method : Direct On Line Approx. weight <sup>3</sup> : 216 lb
Output	25% 50% 75% 100%
Efficiency (%)	89.4 90.2 91.0 91.7
Power Factor	0.38 0.60 0.73 0.80
Foundation loads	
Max. traction	: 244 lb
Max. compression	: 460 lb
Bearing type	: <u>Drive end</u> 6308 2RS <u>Non drive end</u> 6207 2RS
Sealing	: Oil Seal Lip Seal
Lubrication interval	: - -
Lubricant amount	: - -
Lubricant type	: Mobil Polyrex EM
Notes	
This revision replaces and cancel the previous one, which must be eliminated. (1) Looking the motor from the shaft end. (2) Measured at 1m and with tolerance of +3dB(A). (3) Approximate weight subject to changes after manufacturing process. (4) At 100% of full load.	
These are average values based on tests with sinusoidal power supply, subject to the tolerances stipulated in NEMA MG-1.	
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Customer : \_\_\_\_\_

### Thermal protection

ID	Application	Type	Quantity	Sensing Temperature
1	Winding	Thermostat - 2 wires	1 x Phase	155 °C

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# TORQUE AND CURRENT VS SPEED CURVE



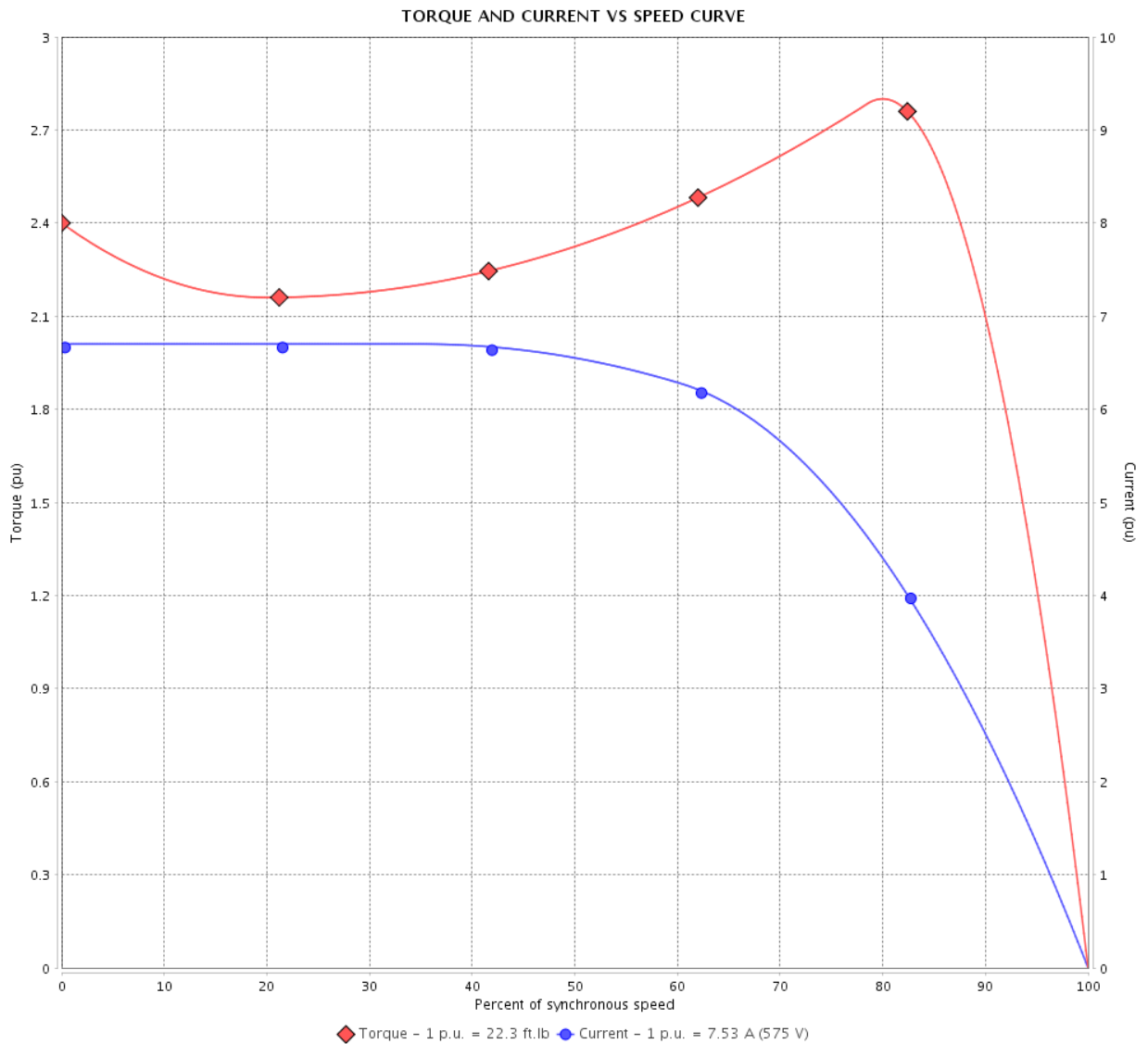
## Three Phase Induction Motor - Squirrel Cage

Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14284389

Catalog # : 00718XT3H213TC



Performance : 575 V 60 Hz 4P

Rated current	: 7.53 A	Moment of inertia (J)	: 1.38 sq.ft.lb
LRC	: 6.7	Duty cycle	: Cont.(S1)
Rated torque	: 22.3 ft.lb	Insulation class	: F
Locked rotor torque	: 240 %	Service factor	: 1.15
Breakdown torque	: 280 %	Temperature rise	: 80 K
Rated speed	: 1765 rpm	Design	: B

Locked rotor time : 21s (cold) 12s (hot)

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# LOAD PERFORMANCE CURVE

Three Phase Induction Motor - Squirrel Cage



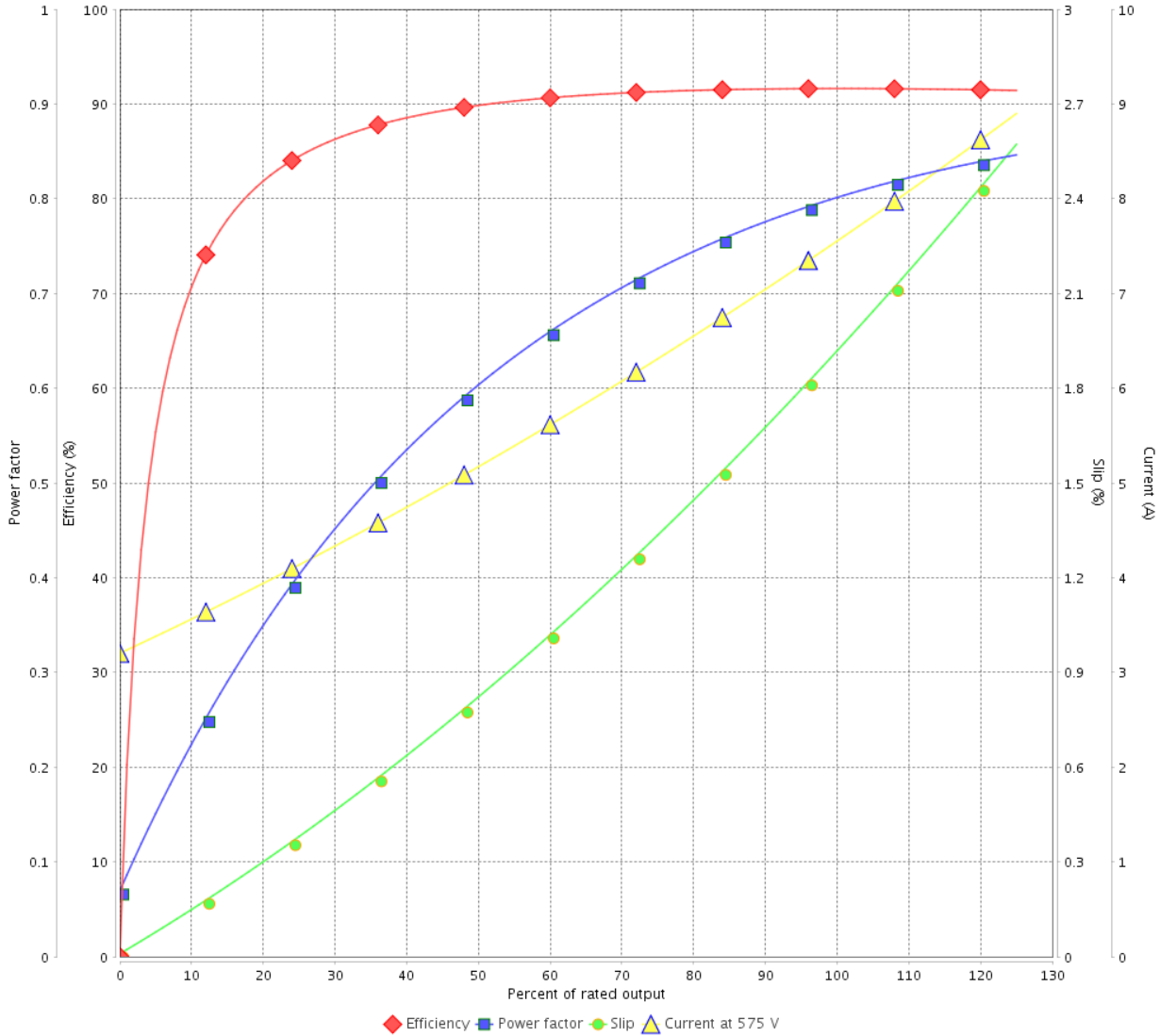
Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14284389

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LOAD PERFORMANCE CURVE



Performance : 575 V 60 Hz 4P

Rated current : 7.53 A  
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 Breakdown torque : 280 %  
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Moment of inertia (J) : 1.38 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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# THERMAL LIMIT CURVE



## Three Phase Induction Motor - Squirrel Cage

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Rated torque : 22.3 ft.lb	Insulation class : F
Locked rotor torque : 240 %	Service factor : 1.15
Breakdown torque : 280 %	Temperature rise : 80 K
Rated speed : 1765 rpm	Design : B

Heating constant

Cooling constant

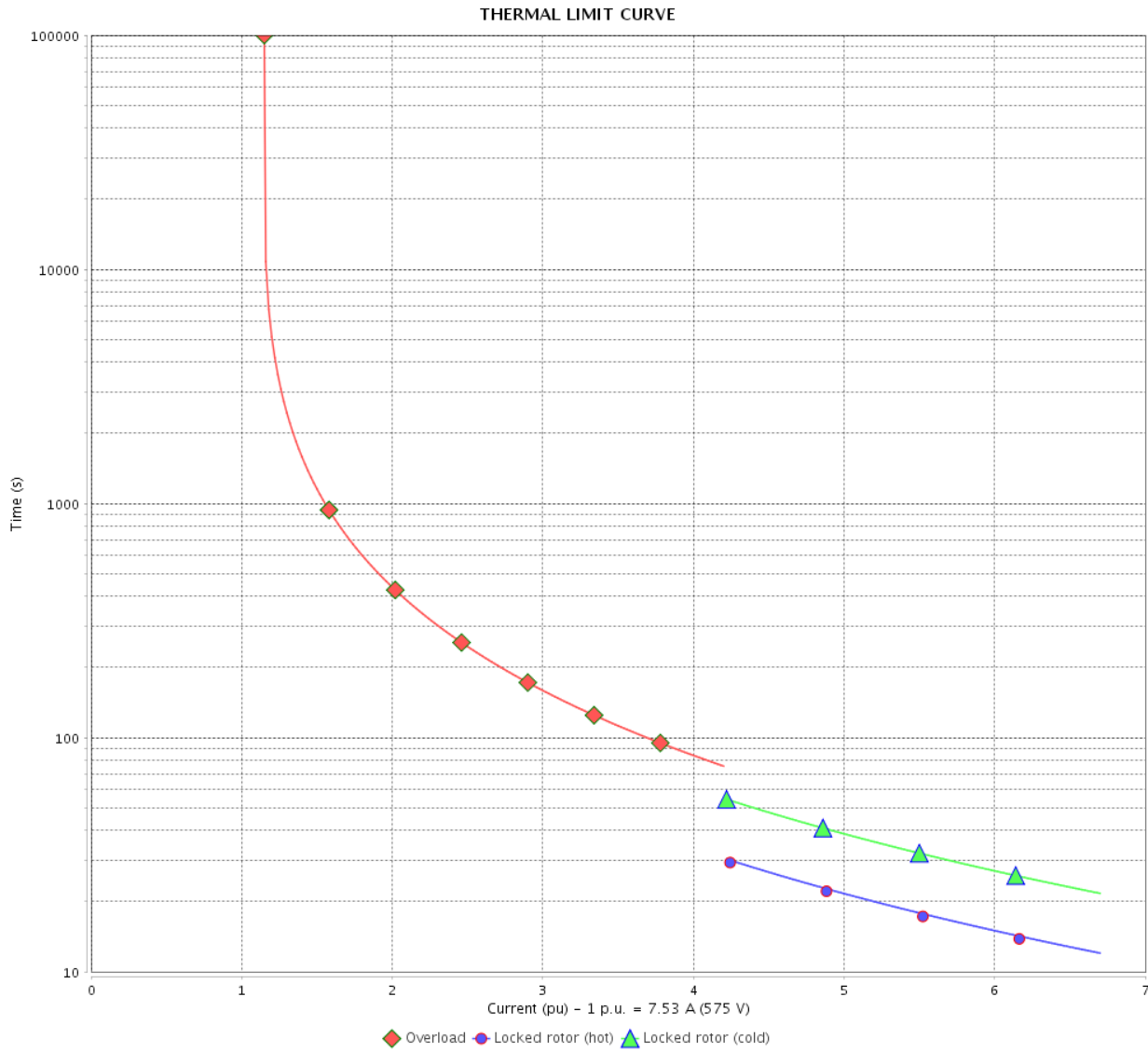
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# THERMAL LIMIT CURVE

Three Phase Induction Motor - Squirrel Cage



Customer : \_\_\_\_\_



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# VFD OPERATION CURVE

## Three Phase Induction Motor - Squirrel Cage

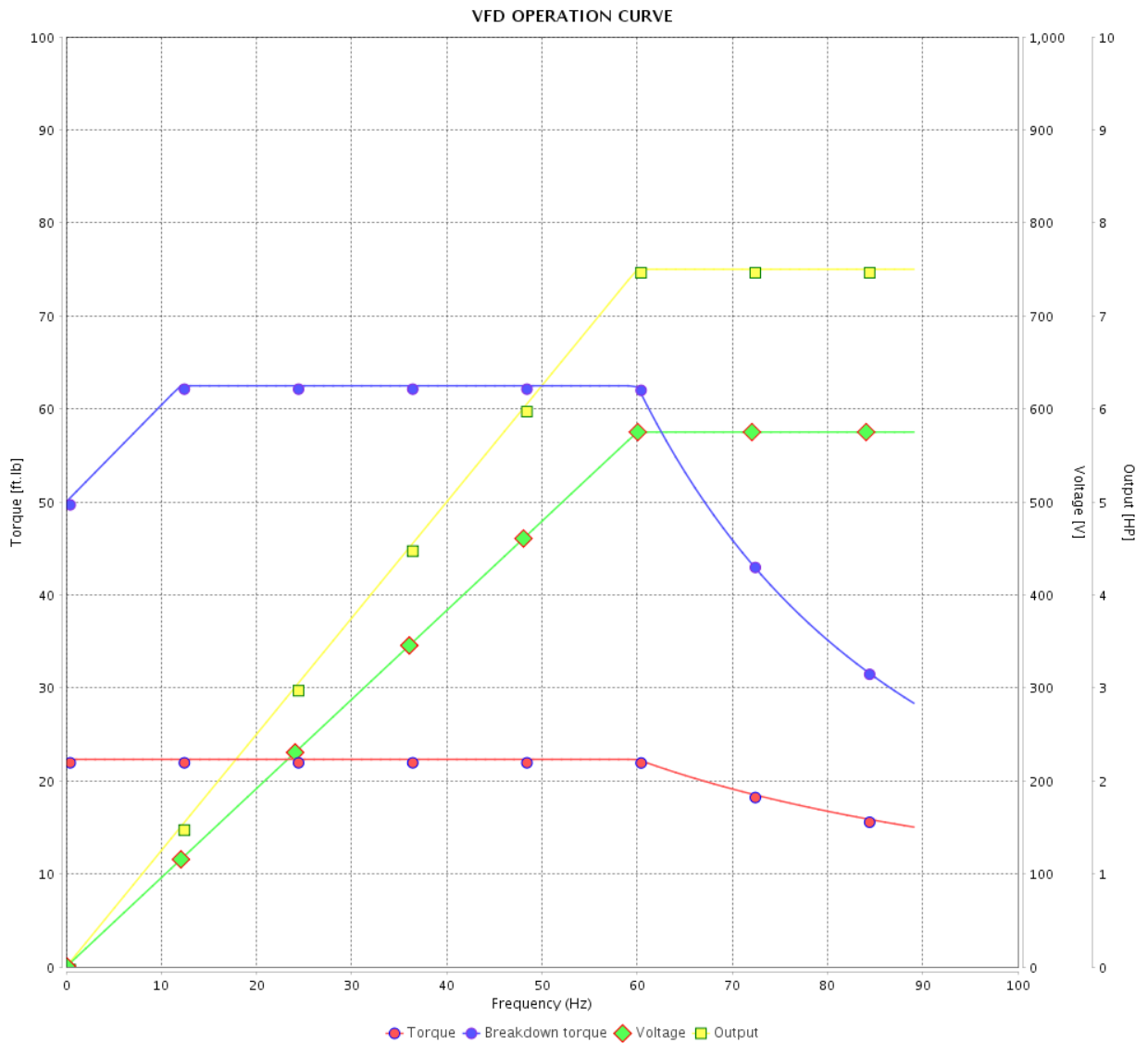


Customer :

Product line : NEMA Premium Efficiency Three-Phase

Product code : 14284389

Catalog # : 00718XT3H213TC

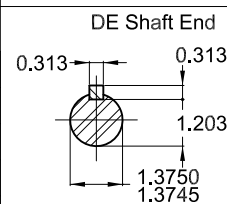
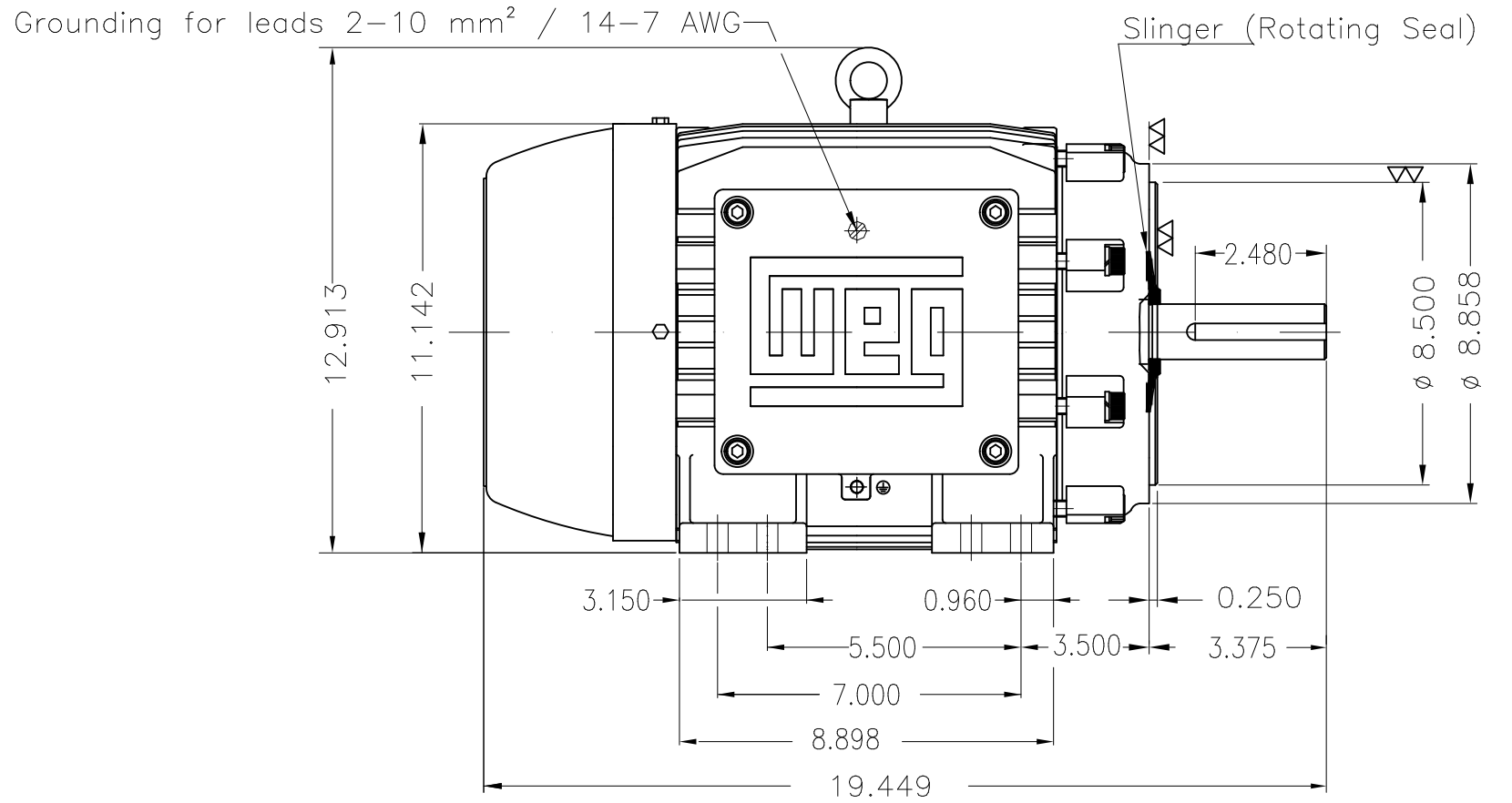
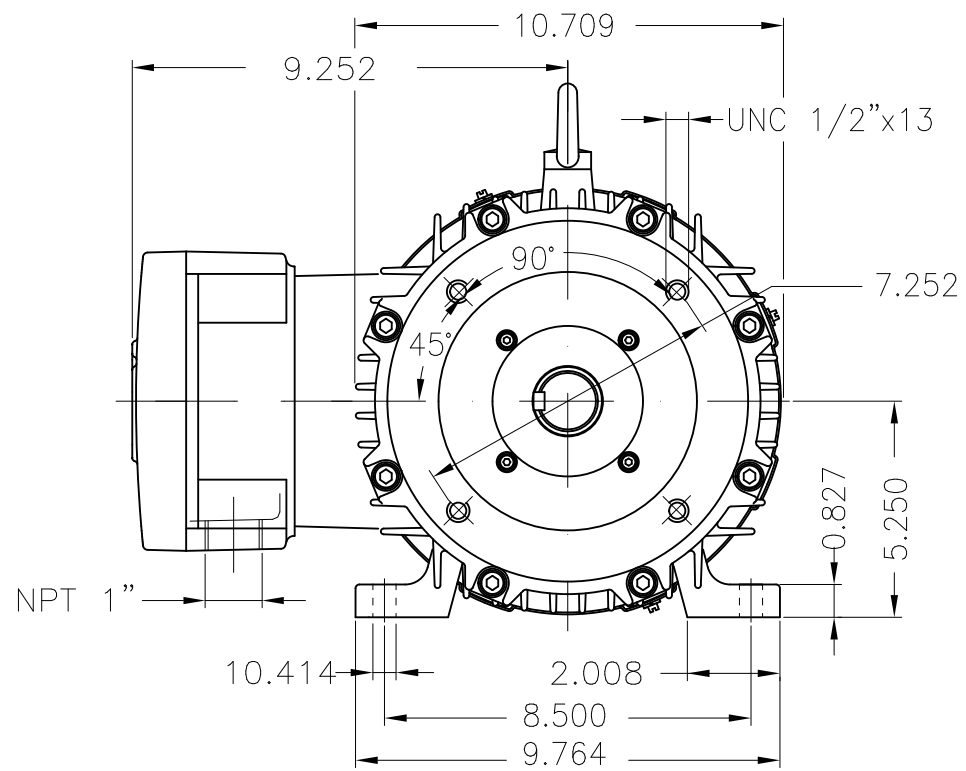


Performance : 575 V 60 Hz 4P

Rated current : 7.53 A  
 LRC : 6.7  
 Rated torque : 22.3 ft.lb  
 Locked rotor torque : 240 %  
 Breakdown torque : 280 %  
 Rated speed : 1765 rpm

Moment of inertia (J) : 1.38 sq.ft.lb  
 Duty cycle : Cont.(S1)  
 Insulation class : F  
 Service factor : 1.15  
 Temperature rise : 80 K  
 Design : B

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Packing - crate  
 Color RAL 5009  
 Painting plan 202P  
 Mounting NEMA F-1  
 Mounting B34R(D)

7.5 HP 04 Poles 60 Hz A

ECM	LOC	SUMMARY OF MODIFICATIONS	EXECUTED	CHECKED	RELEASED	DATE	VER
EXECUTED	PIRWBUSER	THREE PH. MOTOR EXPLOSION PROOF PREM. EFF.					
CHECKED		FRAME 213/5TC IP55 TEFC					
RELEASED							
REL DT.	WMO	Jaragua do Sul	Product Engineering	SHEET		1 / 1	

**PREVIEW**  
 WDD





MADE IN BRAZIL

**W21X NEMA**  
**Premium**

14284389



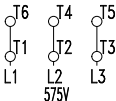
LISTED

CC029A

*Inverter Duty Motor*  
*Severe Duty*

MODEL 00718XT3H213TC

PH 3	FR 213/5TC		
HP(kW) 7.5(5.5)		HZ 60	IP55
V 575		A 7.53	
RPM 1765		NEMA NOM EFF 91.7%	
PF 0.80		SFA 8.66	DES B
INS CL F $\Delta$ T 80 K		SF 1.15	ENCL TEFC
DUTY CONT.		CODE H	ALT 1000 m.a.s.l.
AMB 40°C			
AMB 55°C SF1.0			



→ 6308-2RS MOBIL POLYREX EM  
→ 6207-2RS

212 Lbs



TEMP CODE T3C  
CSA/UL: Class I - Div. 1 - Groups C and D  
CSA: Class II - Div. 1 - Groups F and G  
CSA: Class I - Zone 1 - IIB

EXPLOSION PROOF MOTOR

FOR USE ON VPWM VFD 1000:1VT, 20:1CT, 1.0SF, T3C, AMB 40°C.